

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/087789 A1

(51) International Patent Classification⁷: **C07H 21/00**,
C12Q 1/68, A61K 45/00, A61P 29/00

(74) Agents: **ROBINSON, Christopher, J.** et al.; Smart & Biggar, Box 11560, Vancouver Centre, Suite 2200, 650 West Georgia Street, Vancouver, British Columbia V6B 4N8 (CA).

(21) International Application Number:
PCT/CA2005/000409

(22) International Filing Date: 18 March 2005 (18.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/553,955 18 March 2004 (18.03.2004) US
2,479,968 1 September 2004 (01.09.2004) CA
60/616,640 8 October 2004 (08.10.2004) US
60/632,934 6 December 2004 (06.12.2004) US

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): **THE UNIVERSITY OF BRITISH COLUMBIA** [CA/CA]; University-Industry Liaison Office, 103-6190 Agronomy Road, Vancouver, British Columbia V6T 1Z3 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RUSSELL, James, A.** [CA/CA]; 1963 West 35th Avenue, Vancouver, British Columbia V6M 1H8 (CA). **WALLEY, Keith, R.** [CA/CA]; 4172 Coventry Way, North Vancouver, British Columbia V7N 4M9 (CA).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: PROTEIN C AND ENDOTHELIAL PROTEIN C RECEPTOR POLYMORPHISMS AS INDICATORS OF SUBJECT OUTCOME

Clade	Haplotype	837	1940	2313	2973	3063	3402	3514	3600	4054	4946	5329	5515	6118	6196	Frequency
A	1	C	G	A	C	G	G	G	T	T	T	G	T	A	G	18
	2	C	A	A	C	G	G	G	T	T	T	G	T	A	G	1
	3	C	G	A	C	G	G	A	T	T	T	G	T	A	G	1
	4	C	G	A	C	G	G	G	C	T	T	A	T	A	G	1
B	5	G	G	A	C	G	G	G	T	T	T	G	T	G	G	8
C	6	C	G	A	T	A	C	G	T	C	C	G	C	A	C	16
	7	C	G	C	T	A	C	G	T	C	C	G	C	A	C	1

(57) Abstract: The invention provides methods and kits for obtaining a prognosis for a subject having or at risk of developing an inflammatory condition and for identifying subjects having a greater benefit from treatment with an anti-inflammatory agent or an anti-coagulant agent. The method generally comprises determining a protein C and/or EPCR genotype(s) of a subject for a polymorphisms in the these genes, comparing the determined genotype with known genotypes for the polymorphism that correspond with the ability of the subject to recover from the inflammatory condition and identifying subjects based on their prognosis. The invention also provides for methods of identifying potential subjects having an inflammatory condition who are more likely to benefit from treatment with an anti-inflammatory agent or anti-coagulant agent and subsequent to treatment recover from the inflammatory condition. The invention also provides for methods of treating such subjects with an anti-inflammatory agent or anti-coagulant agent based on the subject's genotype.

WO 2005/087789 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.